

# webMethods Mediator 9.8 Readme

April 2015

This file contains important information you must read before using webMethods Mediator 9.8. You can find webMethods Mediator 9.8 user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find the suite-related information listed below.

*webMethods Product Suite Release Notes*

*webMethods and Intelligent Business Operations System Requirements*

*webMethods System Cache Specifications*

*Using the Software AG Installer*

*Installing webMethods and Intelligent Business Operations Products*

*Using the Software AG Update Manager (fixes)*

*Upgrading webMethods and Intelligent Business Operations Products*

Security and globalization information

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## 1.0 Critical Information

This section lists the critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

None.

## 2.0 Known Issues

This section lists issues that were known for the current release when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- SMGME-3733 (WST-2375)

Some webMethods Mediator policies stop working if you install webMethods CloudStreams on the same Integration Server instance.

When you install both the WmMediator and WmCloudStreams packages on the same Integration Server instance and enable both, run-time policy enforcement in Mediator does not work as expected.

There is currently no workaround for this issue.

- SMGME-3731

If service result caching is enabled, Mediator responds to an error with request headers such as Authorization and SOAPAction.

When a transaction in the virtual service request fails and if you have enable service result caching for the service, Mediator sends back a response with headers like Authorization and SOAPAction from the client request.

There is currently no workaround for this issue.

- SMGME-3730

Results of fault transactions in a service request are also cached as part of service result caching.

When a virtual service is configured with service result caching policy, the results of successful transactions are expected to be cached. However, Mediator caches the results of unsuccessful transactions as well. This results in dirty cache.

There is currently no workaround for this issue.

- SMGME-3715

Mediator does not stop processing requests from an API consumer when the consumer goes over the Hard Limit specified in the Throttling Traffic Optimization policy action.

When the Hard Limit set in the Throttling Traffic Optimization action of a policy is breached by a consumer authenticated using an API key or an OAuth Token, Mediator continues to process requests for the consumer. Monitoring events are raised after limits are breached but the request is not throttled.

There is currently no workaround for this issue.

- SMGME-3239

JSON formatter and builder classes used in client requests to Mediator are not current. Multi-root requests of Content-Type Custom JSON cannot be processed because the JSON formatter and builder classes are outdated. This limitation is only applicable to JSON custom Content-Type and not to native JSON multi-root requests. There is currently no workaround for this issue.

- SMGME-3157 (PIE-33557)

An Integration Server error is encountered when you try to delete an OAuth2 access token if the Mediator is in clustered mode. When you try to delete an OAuth2 access token of a virtual alias in any one of the Mediator nodes that are in an Integration Server cluster, you are not allowed to delete the OAuth2 access token. An error is logged in the Integration Server log. There is currently no workaround for this issue.

- PIE-35707

Integration Server changes the Content-Type of GET and DELETE requests to application/x-www-form-urlencoded. The Content-Type of a REST request sent to a native service is always set as application/x-www-form-urlencoded if the request is GET or DELETE. Integration Server overwrites the Content-Type set by the client with the Content-Type application/x-www-form-urlencoded. There is currently no workaround for this issue.

- SMGME-3801

Mediator ignores the API Key query parameter in the endpoint URL, if it is not the first query parameter. The parameter value is however passed on to the native service. The API Key query parameter is also case sensitive. There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides additional information you need to work with the current release of webMethods Mediator.

None.

## 4.0 Fixes Included in Each Release

This section lists the fixes that have been included in each release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 9.8***

- XB\_9.7\_Fix1
- XB\_9.7\_Fix2
- XB\_9.7\_Fix3

### ***Release 9.7***

None.

### ***Release 9.6***

None.

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section.

### ***Release 9.8***

None.

### ***Release 9.7***

- SMGME-3146

The HTTP headers in a Mediator request are case sensitive.

RFC2616 protocol requires that all HTTP header fields should not be case sensitive. The HTTP headers in a Mediator request are case sensitive and should be changed as per the RFC2616 protocol.

This issue is now resolved.

## Release 9.6

- SMGME-2099  
Deploying a virtual service with an invalid password for a valid user can also result in failures of valid service invocations.  
This issue occurs with virtual services whose Routing Protocol step use either HTTP Basic authentication or NTLM authentication and with the "Use credentials from incoming request" option selected. If such a virtual service is deployed to Mediator with an invalid password for a valid user, the password gets updated in the passman. As a result, valid service invocations will fail as well. Note that in Mediator, the password for the user to authenticate to back-end services is shared through the passman infrastructure.  
This issue is now resolved.
- SMGME-2017  
Mediator mistakenly closes the connection with a WCF client after a long pause.  
When a WCF client makes a request after a long pause to access a virtual service which is configured to run in NTLM Transparent mode, Mediator closes the connection which is supposed to be kept alive.  
This issue is now resolved.
- SMGME-2181  
Mediator does not properly handle requests with the Accept header set to multiple Content-Types. When handling requests with an Accept header set to multiple Content-Types (for example, Accept:application/soap+xml, multipart/related, text/html,image/gif, image/jpeg, \*, q=.2, \*/\*; q=.2), Mediator encounters issues while parsing native service responses.  
This issue is now resolved.
- SMGME-2277  
EnvelopeString is not passed when watt.server.SOAP.MTOMStreaming is set to true.  
When virtual services invoke IS services, EnvelopeString is not passed if the IS property watt.server.SOAP.MTOMStreaming.enable property is set to true. This occurs for both MTOM and non-MTOM requests.  
With this fix applied, when watt.server.SOAP.MTOMStreaming.enable is set to true, EnvelopeString will be passed for non-MTOM requests.  
Limitation: EnvelopeString will not be sent to IS services if a request uses the "MTOM" SOAP Optimization Method and if the Integration Server property watt.server.SOAP.MTOMStreaming.enable is set to true.
- SMGME-2449  
For a virtual REST service request with multi-root node JSON content, Mediator incorrectly logs the requests and responses.  
This issue occurred when both of the following conditions were met:
  - a) The "Log Invocation" run-time action is configured to log both requests and responses.
  - b) A virtual REST service request contains multi-root node JSON content such as this:

```
{
```

```
{ node1 }  
{ node2 }  
}
```

Then Mediator incorrectly logs only the first node:

```
{  
  { node1 }  
}
```

This issue is now resolved. Mediator now logs all nodes of the JSON content.

- SMGME-2364  
Mediator changes the Content-Type of REST service responses to application/octet-stream in case of an error or fault.  
When an error or fault occurs for a REST service invocation, Mediator always changes the Content-Type of responses sent by the native service to application/octet-stream.  
With this fix applied, Mediator retains the Content-Type of the responses sent by the native service.
- SMGME-2206  
Mediator's NTLM authentication support in "Transparent" mode is not stable.  
Mediator's NTLM authentication support in "Transparent" mode is not stable when tried with clients that use a connection pool.  
This issue is now resolved. Users who have clients that use connection pools are advised to instead configure Mediator's NTLM "Transparent" mode so that it enables Kerberos authentication. To do this, set the property `watt.pg.disableNtlmAuthHandler` to true. Thus, if you select "NTLM" authentication in "Transparent" mode, Mediator will perform the Kerberos Windows authentication (and not NTLM Windows authentication).
- SMGME-2317  
Performance metrics are sometimes not communicated properly between Mediator and CentraSite due to a "connection closed" exception.  
Performance metrics are published from Mediator to CentraSite using UDDI. A UDDI authToken is required to save the performance metrics. If CentraSite is restarted, or if CentraSite and Mediator are disconnected, this authToken expires. Refetching this authToken throws a "connection closed" exception in CentraSite.  
This issue is now resolved. If the authToken expires or if a disconnect occurs, Mediator will fetch the authToken again and publish the Performance metrics in CentraSite. In CentraSite, this issue was fixed by properly handling the closed connection so that refetching the authToken will not cause a "connection closed" exception.
- SMGME-2558  
Audit records containing Mediator transaction events are lost.  
When an exception occurs during audit logging, the audit records should be written to the failed audit log. However, Mediator does not write to the failed audit log in this scenario, thus resulting in the loss of audit records.  
This issue is now resolved.

- SMGME-2181

Mediator does not properly handle request with an Accept header set to multiple Content-Types. When handling requests with an Accept header set to multiple Content-Types (for example, Accept: application/soap+xml, multipart/related, text/html, image/gif, image/jpeg, \*; q=.2, \*/\*; q=.2), Mediator encounters issues while parsing native service responses. This issue is now resolved.

SMGME-2553

For a virtual REST service request with JSON content, Mediator improperly sends a null value of a parameter as a "null" string to the native service.

If a virtual REST service request contains JSON content with a null value as follows:

```
{
  "_id": "2e572eb7aa7358324cfa0b96bb001a7c",
  "_rev": "1-d13e06d7d560a7395dc240c90858da30",
  "Data": {
    "name": "JoeSmith",
    "age": null
  }
}
```

Then Mediator considers the null value as a String and, while sending it to native service, it converts null to "null", which is not acceptable.

This issue is now resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation in each release, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content.

### ***Release 9.8***

None.

### ***Release 9.7***

None.

### ***Release 9.6***

None.

## 7.0 Terminology Changes

### ***Release 9.8***

None.

### ***Release 9.7***

None.

### ***Release 9.6***

None.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed.

### ***Release 9.8***

Added Item	Description
The results of service invocations can be cached in Mediator.	<p>Mediator supports caching of the results of native service invocations for incoming requests based on the caching criteria that you specify. The caching criteria can be based on one of following:</p> <ul style="list-style-type: none"><li>• HTTP Header</li><li>• Path</li><li>• XPath Expression</li></ul> <p>You can use this option to store and retrieve results for services which do not require state values and live data.</p> <p>Caching the service results helps in reducing the overall response time and bridges any temporary network failures when Mediator invokes a native service.</p>

Added Item	Description
<p>Mediator supports REST to SOAP conversion of a REST request to invoke a SOAP service.</p>	<p>Mediator clients can now invoke SOAP APIs using a REST request as well as a SOAP request. This functionality enables you to expose the existing SOAP based services as REST services to the new API scenarios. You no longer have to write new REST services for this purpose.</p> <p>Restful invocation of SOAP APIs is enabled by default in CentraSite using the Enable REST Support policy action. You can disable the support by deleting the Enable REST Support policy action for the service.</p> <p>If the REST support is enabled, Mediator converts SOAP services to REST services during runtime invocation of the services.</p>
<p>Mediator Logging enhancements</p>	<p>New Mediator components added in the Integration Server Logging page. These logging facilities are listed under Mediator in the Server Logger Configuration list and cover among other things monitoring and event logging, service deployment, CentraSite communication, Mediator policies and runtime, alerts, cache management. You can set the log level for each of these facilities.</p> <p>Mediator Listener is the component added newly to enable logging of incoming messages before Mediator processes a request.</p> <p>Incoming Messages is another component added newly to enable logging of incoming messages after Mediator receives a request.</p> <p>For additional details, see <i>webMethods Integration Server Administrator's Guide</i>.</p>
<p>Cross-platform NTLM Support</p>	<p>Added NTLM Authentication support for virtual services in UNIX platforms like Linux.</p> <p>A virtual service deployed on Mediator running on a Linux system can be enabled with NTLM authentication.</p>

Added Item	Description
Set default message type for REST request and response messages	<p>A default message type can be defined for Request and Response messages. This message type is used if no Content-Type is set by the client.</p> <p>Mediator will use the Content-Type set in the Set Media Type policy action configured for the request and response steps in CentraSite if the client sends a request without the Content-Type and Accept headers.</p>

Added Item	Description
pg.rampartdeploymenthandler.responseTimeToLive property	<p>Added to allow Mediator to set the Time to Live (TTL) value of a SOAP response sent to client. The TTL value set using this property can be used to include timestamp along with the assertions: WS-Security username token, X509 certificate token, Encryption, or Signature.</p> <p>A timestamp assertion is used to indicate the expiry of a message initiated by Mediator. The response message becomes invalid if the timestamp has expired.</p> <p>To change the default TTL value (300 seconds), include this property in the pg-config.properties file at Integration Server_directory  \instances\instance_name \packages\  WmMediator\config\resources\  as follows:</p> <pre>pg.rampartdeploymenthandler.responseTimeToLive = 120</pre> <p>Reload the WmMediator package in Integration Server. In the example above, the TTL value is set to 2 minutes (120 seconds).</p> <p>This value applies to all virtual services deployed to Mediator.</p>

Removed Item	Replacement
None.	

**Deprecated Item****Replacement**

None.

**Changed Item****Description**

Dependency on Win32 package is removed

When NTLM authentication was supported only on the Windows platform, it was necessary to enable the Win32 package. Starting with this version, the dependency on the Win32 package is removed and it is no longer necessary for NTLM authentication.

**Release 9.7****Added Item****Description**

Multiple resources can be defined for virtual REST APIs.

The enhanced REST framework in CentraSite allows you to explicitly define multiple resources for a RESTful API. You can use the resource path tokenizer to handle the multiple resources at run-time. The tokenizer for substituting a resource path is automatically appended to the API's endpoint (base URL) by a path variable `#{sys:resource_path}`.

If you have defined multiple resources for an API, Mediator replaces the resource path tokenizer at run-time with the appropriate resource path that is defined for the particular resource call.

If you have defined an XSLT transformation or webMethods Integration Server services in the request or response processing step of a REST service, then you need to append the resource name to the method name in order to refer to that resource. For example, if you have defined a resource "phones" for the GET method, you will refer to the resource using GET\_phones.

**Removed Item****Replacement**

None.

**Deprecated Item****Replacement**

None.

**Changed Item****Description**

None.

**Release 9.6****Added Item****Description**

The `watt.pg.disableNtlmAuthHandler` property.

Added to support Kerberos Transparent mode support (see “Kerberos Transparent mode support” below).

**Removed Item****Replacement**

None.

**Deprecated Item****Replacement**

None.

**Changed Item****Description**

Kerberos Transparent mode support.

In the Routing Protocols processing step of a virtual service, if you select the HTTP Authentication mode “NTLM” in “Transparent” mode, Mediator performs the Kerberos Windows authentication (and not NTLM Windows authentication) if the property `watt.pg.disableNtlmAuthHandler` is set to true. If the property is set to false (the default), Mediator performs the NTLM Windows authentication.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

### ***Release 9.8***

None.

### ***Release 9.7***

None.

### ***Release 9.6***

Added Service	Description
pub.mediator.oauth2.getOAuth2AccessToken	A REST service which is used for obtaining OAuth2 access tokens. This is a public service and can be accessed anonymously. Authentication is performed based on the client credentials that are sent to the service. For additional details, see the product documentation.

Removed Service	Replacement
None.	

Deprecated Service	Replacement
None.	

Changed Service	Description
None.	

## **10.0 Added, Removed, Deprecated, or Changed Parameters**

### ***Release 9.8***

None.

### ***Release 9.7***

None.

### ***Release 9.6***

None.

## **11.0 Added, Removed, Deprecated, or Changed APIs**

### ***Release 9.8***

None.

### ***Release 9.7***

None.

### ***Release 9.6***

None.

## **12.0 Copyright Information**

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## **13.0 Support**

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Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

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